

ABSTRACT

According to the invention, a method and apparatus are disclosed for providing multiline telephonic and data services over a single access facility. In one embodiment of the present invention, a wall unit is located at a customer premises which terminates a single analog phone line and adaptively encodes using Voice over Internet Protocol technology and multiplexes a plurality of telephonic and data calls over the single analog phone line. A corresponding gateway server (or a plurality of gateway servers), which supports one or a plurality of wall unit calls, is located in the public switched telephone network ("PSTN"), or possibly in a private telephone network. The gateway server communicates with one or more active wall units to extract one or more telephonic and data calls from the analog signal produced from a wall unit, and to appropriately route the telephonic calls over the PSTN and the data packets over the Internet or to other data services. The telephonic and data devices connected to the wall unit are each assigned individual virtual phone numbers by the provider of the service embodying this invention. To reach one of these devices, its respective virtual telephone number is used. The virtual phone numbers are published across the PSTN and therefore can be reached from anywhere on the PSTN. In another embodiment, virtual phone numbers are not required, as phone calls destined for subscribed telephone number are automatically routed through the gateway server.